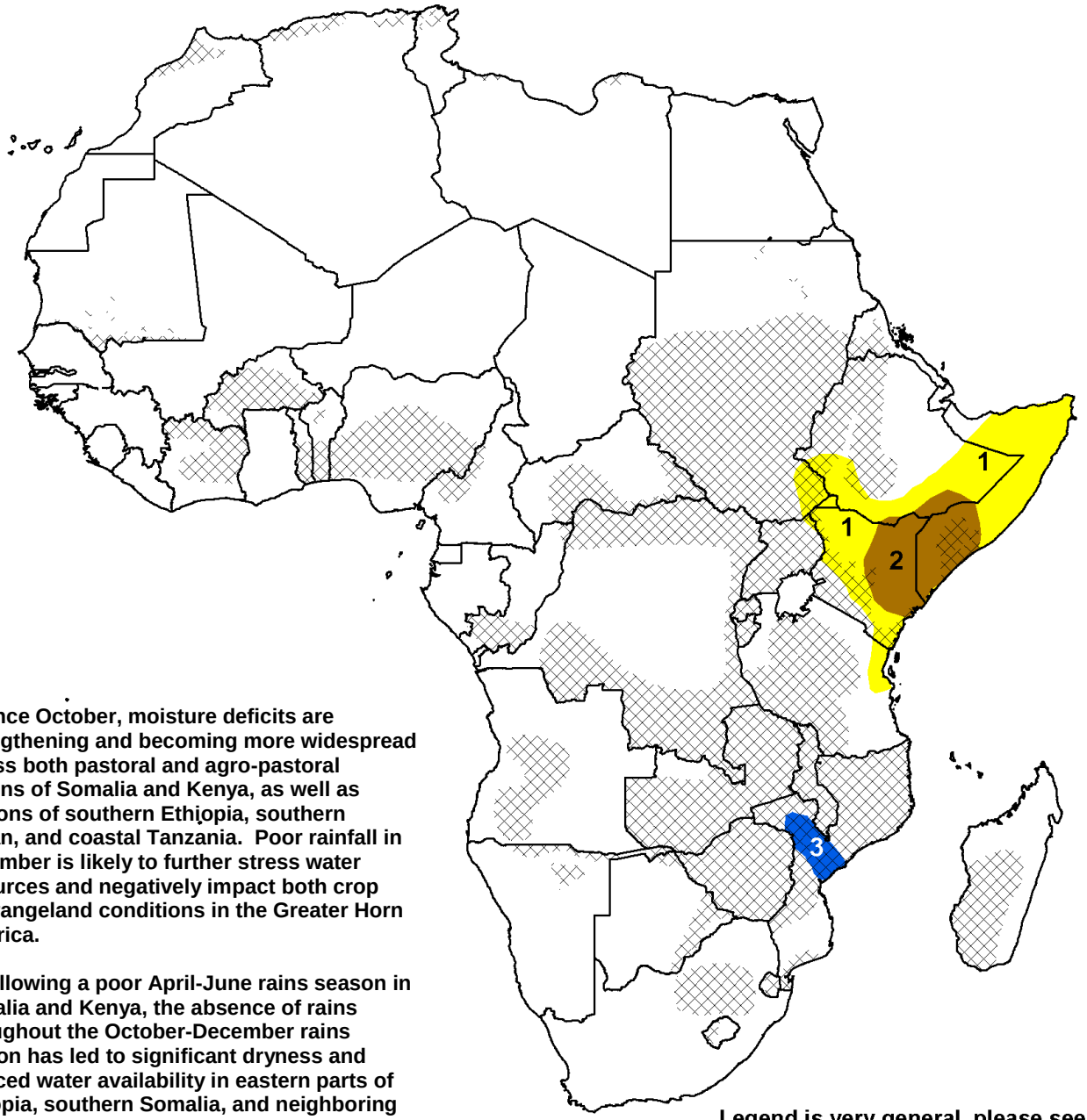
The USAID FEWS NET Weather Hazards Impacts Assessment for Africa
December 30, 2010 – January 5, 2011

- **Above-average rainfall in late December continues to saturate ground conditions across many local areas in southern Africa.**



1) Since October, moisture deficits are strengthening and becoming more widespread across both pastoral and agro-pastoral regions of Somalia and Kenya, as well as portions of southern Ethiopia, southern Sudan, and coastal Tanzania. Poor rainfall in December is likely to further stress water resources and negatively impact both crop and rangeland conditions in the Greater Horn of Africa.

2) Following a poor April-June rains season in Somalia and Kenya, the absence of rains throughout the October-December rains season has led to significant dryness and reduced water availability in eastern parts of Ethiopia, southern Somalia, and neighboring parts of Kenya.

3.) Combined with increased discharges from the Cahora Bassa dam, above-average rainfall across many portions of Zambia, Zimbabwe, and Mozambique has elevated the risk for downstream flooding in the Zambezi River basin in parts of western and central Mozambique.

Legend is very general, please see numbered descriptions for details.

- December Cropped Areas
- Favorable
- Somewhat Favorable
- Flooding
- Short-term Dryness
- Drought
- Improving Drought

Seasonably ample rainfall continues in the south.

In the last seven days, moderate to high amounts of precipitation were received across a number of areas in southern Africa. The highest weekly rainfall accumulations (> 50mm) were observed across central Angola and northern Zambia, with locally heavier totals (>75mm) in western Mozambique and northeastern Zimbabwe. More moderate and well-distributed rainfall amounts (30-50mm) were also observed in portions of Tanzania and South Africa, with lower totals for a number of local areas in Botswana and the Caprivi Strip region (**Figure 1**). Compared to the previous week, there was a favorable return rainfall over tropical southern Africa. This followed a brief period of dryness in mid-December, especially over parts of northern Zambia and Tanzania.

During the last 30 days in southern Africa, the highest precipitation surpluses remain throughout many areas in the Zambezi River Basin, and in areas across central Angola. In southern Malawi, central and western Mozambique, and neighboring provinces in southern Zambia, many local areas have received more than twice their normal rainfall accumulation for December (**Figure 2**). While the extent of these rainfall surpluses are expected to benefit current cropping activities in Zambia, Zimbabwe, Malawi and Mozambique, increased discharges from local dams, and overly saturated soils have already raised concerns for inundation along the Zambezi and Pungwe rivers in Mozambique. A continuation of above-average rainfall, particularly over parts of southern Zambia, and northern Zimbabwe is likely to prolong the high flooding potential further downstream in Mozambique.

Precipitation forecasts indicate another week seasonably moderate to heavy rainfall in southern Africa. A robust distribution of high rainfall (>50mm) is expected over the tropical belt of southern Africa, with high probabilities for locally, intense rainfall (>100mm) over parts of Zambia, Mozambique, and South Africa.

Satellite Estimated Precipitation (mm)
Valid: December 19th – December 25th, 2010

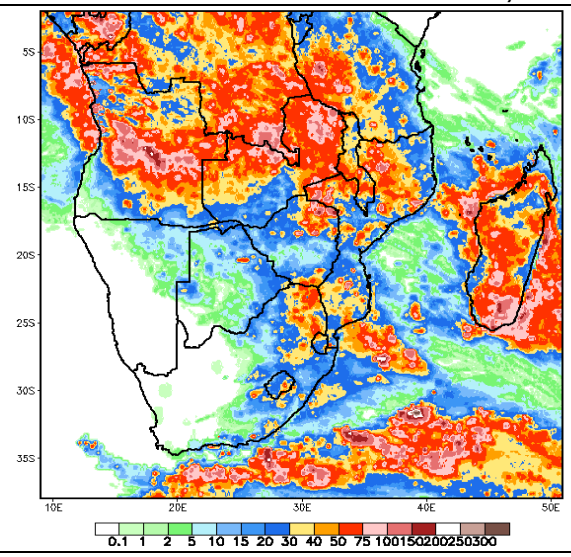


Figure 1: NOAA/CPC

Satellite Estimated Precipitation Anomaly (mm)
Valid: November 26th – December 25th, 2010

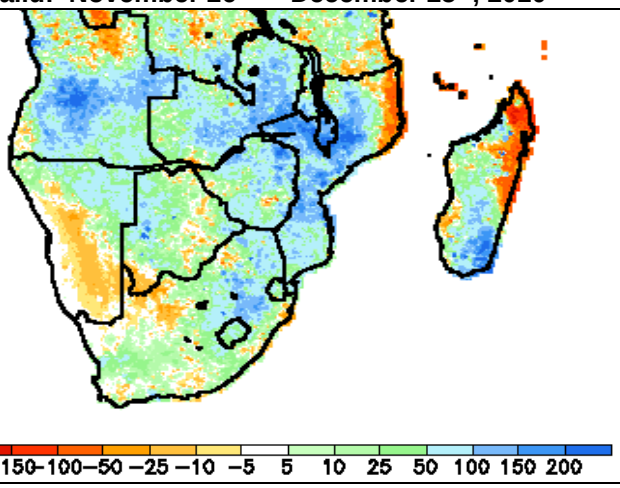


Figure 2: NOAA/CPC

Poor October-December rains add to a pattern of extended dryness in the Greater Horn.

As the October-December rains season comes to an end, both the distribution and magnitude of rainfall has been characterized as exceptionally poor. The seasonal dryness is expected to worsen ground conditions throughout the Greater Horn, as moisture deficits have strengthened over the last 6 months (**Figure 3**). This long-term dryness is expected to negatively impact pastoral and agro-pastoral areas, and continue to deplete water availability for a number of local areas in southern Ethiopia, Kenya and Somalia until the next rains season.

Standardized Precipitation Index (SPI)
Valid: As of 2nd Dekad of December, 2010

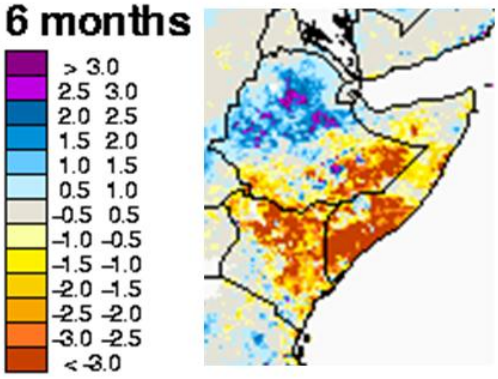


Figure 3: USGS/EROS

Note: The hazards assessment map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

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